

Physical Development and Health

Introduction

During the first few years of life the human body changes continuously and dramatically. These changes are not simply a matter of growing taller or gaining more weight; they also involve a complex series of changes in body composition, proportion, and motor development. Children's physical well-being, health, and motor development are cornerstones of early development and learning – and key dimensions of school readiness.

Physical Development

Physical and motor development occur along a relatively predictable sequence from simple to more complex. First, most children develop from head to toe; for example, young children gain control of their neck muscles before they develop the skill to control their arm movements, which, in turn, occurs before children learn to walk. Second, children develop skills from the center of their bodies outward; for example, young children gain control of balance and their center of gravity before they develop the skills to catch and throw using their arms. Third, children develop motor skills involving large portions of their body first and then progress to skills using specific body parts; for example, young children hold objects by grasping them between fingers and palm before using the thumb and index finger in a more sophisticated pincer grasp.

Health

Young children begin to learn that health practices can affect their health and set a pattern for their lives. Adult modeling and discussion about good health practices help equip young children with the knowledge and skills to thrive physically, mentally, emotionally, and socially. This helps young children meet the challenges of growing up—understanding the benefits of safety, prevention, good hygiene, and appropriate medical care.

Caregivers can help foster children's healthy **physical development** and **health**. Here, we outline milestones of child development and caregiver strategies in the following sub-domains:

Strand 1: Gross Motor Development: Gross motor skills are characterized by movements of the entire body or large portions of the body and include the abilities to roll over, walk, run, jump, hop, skip, and climb.

Strand 2: Fine Motor Development: Fine motor skills involve the ability to coordinate smaller muscles in the arms, hands, and fingers, and include grasping, cutting with scissors, or fastening buttons.

Strand 3: Health and Well-Being (Nutrition and Self-care Practices): Essential aspects of physical health are good personal hygiene and basic personal care practices, including daily living skills such as healthy sleep patterns, bathing, dressing, and dental hygiene. Also included in health and personal care is support and encouragement for children to eat a variety of nutritious foods and become aware of basic health and safety rules.



Strand 1: Gross Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
A1. Demonstrate beginning signs of balance, control, and coordination.	Lift head and chest while on tummy. Turn head from side to side, kick feet, and move hands.	Providing periods of supervised “tummy time” when infant is awake.
A2. Demonstrate proficiency in rolling over, sitting, crawling.	Push her chest and head off the floor. Sit with support and, later, sit without support. Rock back and forth on hands and knees, and begin to crawl.	Playing interactive games and singing songs from child’s cultural background that involve child’s hands and feet. Providing a safe environment and objects for child to be physically active. Providing physical activities that promote balance (e.g., rocking, swinging, rolling, spinning).
A3. Demonstrate improved balance, control, and coordination.	Move from sitting to standing while holding onto a chair or toy with little difficulty. Walk sideways along furniture and walk with one or both hands held. Walk without help. Walk unaided to reach a destination.	Providing opportunities for child to run, throw, jump, and climb and strike (e.g., hitting at a suspended ball or balloon). Placing a variety of washable objects within reach for infants to look at and stretch for. As infants increase mobility, place objects further away. Providing opportunities for child to move freely during waking hours. Providing push toys, low climbers, steps and slides. Modifying activities for child with special needs (e.g., provide ramps or low steps to ensure access to climbing equipment).
A4. Coordinate movements in grabbing, rolling, tossing, and throwing.	Use whole body to catch and throw. Kick and throw a ball, but with little control of direction or speed.	Introducing child to beanbag and ball activities.

Strand 1: Gross Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
A5. Move with some balance and control.	<p>Start, turn, and stop when running without crashing into things.</p> <p>Use alternating feet when going up stairs (coming down stairs may still be one step at a time without alternating feet).</p> <p>Walk on a line on the floor.</p>	<p>Providing safe equipment and environments that vary in skill levels for child to use during play (e.g., tricycles, tires, hoops, balls, balance beam, climbing equipment).</p> <p>Providing opportunities for child to practice movement by listening to music and moving.</p>
A6. Show increasing levels of proficiency, control, and balance in walking, climbing, running, jumping, hopping, skipping, marching, and galloping.	<p>Walk up and down stairs independently, using alternating feet without holding the rail.</p> <p>Jump with both feet together and climb up the steps of a toddler gym.</p>	<p>Teaching child new skills (e.g., skip, throw overhand, jump rope, hula hoop, swim).</p> <p>Providing safe equipment and environments that vary in skill levels (e.g., tricycles, tires, hoops, balls, balance beam, climbing equipment).</p>
A7. Coordinate movements in more complex gross motor tasks, such as throwing, catching, kicking, bouncing balls, and using the slide and swing.	<p>Move body into position to catch a ball, and then throw the ball in the right direction.</p> <p>Use leg movements to sustain swinging.</p>	<p>Playing games such as, "Follow the Leader" with gross motor activities such as, jumping, hopping, running, marching, etc.</p> <p>Playing simple games with balls involving throwing, catching, bouncing, and kicking.</p> <p>Providing activities in which only one side of the body is used at a time (e.g., hopping, standing on one foot).</p>
A8. Make successful transitions between sequential motor skills.	<p>Demonstrate progress transitioning from running to skipping.</p> <p>Hop first on one foot, then the other.</p>	<p>Imitating animal movements to music such as galloping like a horse, running like a cheetah, hopping like a bunny, alternating motor skills.</p>

Strand 1: Gross Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
A9. Coordinate movements to perform simple tasks.	<p>Catch a large ball with two hands.</p> <p>Throw a ball into a basket.</p> <p>Kick a large stationary ball in a forward direction.</p>	<p>Introducing games where children can kick or throw a ball in an intended direction.</p> <p>Creating paths for children to follow when riding tricycles and other riding equipment.</p>
A10. Demonstrate increasing stamina, endurance, control, balance, and coordination.	<p>Balance on one foot briefly and later maintain balance on a 2 x 4 balance beam that is close to the ground.</p> <p>Develop mastery over running skills (such as quick stops, full circle turns, short 180-degree turns, speeding up and slowing down).</p> <p>Hop several times on each foot.</p>	<p>Providing opportunities for dance and other movement activities that use both sides of the body (e.g., bending, twisting, stretching, balancing).</p>
A11. Use balance and control to perform large motor tasks.	<p>Move through an obstacle course forwards and sideways using a variety of movements with ease.</p> <p>Maintain balance while bending, twisting, or stretching.</p> <p>Carry a glass of water or juice across the room without spilling it.</p>	<p>Providing opportunities for child to try different body positions (e.g., bending, twisting).</p>
A12. Coordinate movements to perform more complex tasks.	<p>Throw a ball in the right direction, aiming at a target with reasonable accuracy.</p> <p>Catch a ball by moving arms or body to adjust for the direction the ball is traveling and later hit a stationary target with an overhand throw.</p> <p>Kick a large ball with a two-step start.</p>	<p>Including child in simple, small physical chores (e.g., taking out trash, raking leaves).</p> <p>Providing opportunities for child to participate in activities that develop large muscles (e.g., soccer, dance, basketball, freeform play with balls, bicycle riding).</p>

Strand 2: Fine Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
B1. Develop some ability to grasp and hold a variety of objects.	Grasp adults' fingers. Grab onto own toes.	Providing toys that make noises as infants move, such as rattles, as well as soft toys that they can squeeze.
B2. Demonstrate beginning signs of strength, control, and eye-hand coordination.	Mimic hand clapping or a wave. Look at and transfer objects from hand to hand. Reach for and grasp objects such as rattles, soft toys and blocks using whole hand to grasp.	Playing hand games with child. Providing opportunities for child to reach for objects. Allowing the child free mobility within a safe environment.
B3. Improve eye-hand coordination in reaching for and grasping objects, and filling and dumping.	Empty objects from containers. Pick up a piece of cereal with thumb and forefinger (pincer grasp).	Providing opportunities for child to pick up small objects and place into containers. Giving child appropriate finger foods to eat (e.g., dry cereal, cooked vegetables).
B4. Demonstrate growing strength, dexterity, and control needed to perform a variety of fine motor tasks.	Work with play dough and clay. Build a tower of two to four cubes and later to five or six cubes. Turn pages of large books, often turning multiple pages at the same time.	Providing activities that strengthen hand grasp (e.g., molding play dough) and offering opportunities for sensory experiences with mediums such as sand and clay. Providing opportunities for child to use pincer grasp of thumb/forefinger (e.g., gluing small pieces of paper, peeling/sticking stickers, picking up small objects with fingers). Giving child board books to look at independently.

Strand 2: Fine Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
B5. Demonstrate advancing strength, control, and eye-hand coordination.	<p>Use one hand to turn the pages of a book.</p> <p>Build a tower of several blocks.</p> <p>Work simple "insert" puzzles (e.g., completes simple puzzle, uses shape sorter box).</p>	<p>Reading with child daily, modeling appropriate book handling.</p> <p>Engaging child in activities that promote moving fingers individually (e.g., finger plays, making music).</p> <p>Providing materials with which child can manipulate objects and practice self-help skills (e.g., puzzles, pop-it beads, comb, eating utensils).</p>
B6. Use strength and control to perform simple tasks.	<p>Open and close blunt scissors with one hand.</p> <p>Push beads together and then pull them apart.</p> <p>Place pegs into the peg board and then remove them to see how they fit and whether all the holes can be filled.</p>	<p>Demonstrating and providing opportunities for child to use scissors safely.</p> <p>Providing experiences that support the use of hands in many different positions (e.g., painting at an upright easel).</p>
B7. Use eye-hand coordination to perform simple tasks.	<p>Turn a puzzle piece several different ways to find the right fit.</p> <p>Experiment with making structures out of 1-inch cubes.</p> <p>Use different drawing tools, such as crayons, markers, chalk, brushes, and sponges for painting lines, shapes, and designs.</p>	<p>Providing puzzles, small blocks, and tools for art, including scissors, paper punches, and tape.</p> <p>Stringing beads, using lacing cards, offering a variety of puzzles to build hand-eye coordination.</p> <p>Providing opportunities for child to draw shapes and designs using crayons, chalk, and large pencils.</p>
B8. Imitate writing by scribbling, usually without regard to direction or location.	<p>Make marks on paper with large writing/drawing implements (e.g., thick pencil, crayon, marker).</p> <p>Imitate horizontal and vertical lines.</p>	<p>Modeling uses of writing and drawing in everyday life.</p> <p>Providing opportunities for child to use a variety of writing materials.</p>

Strand 2: Fine Motor Development

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
B9. Show beginning control of writing, drawing, and art tools.	<p>Write some recognizable letters or numbers.</p> <p>Draw with markers and then deciding that the picture is a dog, a monster, or "me."</p> <p>Use glue sticks to paste a variety of items on collages.</p>	<p>Engaging child in writing letters and stories for friends or family.</p> <p>Modeling writing, drawing, and the use of art tools, including pencils, markers, chalk, paint brushes, and various types of technology.</p> <p>Modifying activities to ensure participation of child with special needs (e.g., attach rubber grips to pencils and pens).</p>
B10. Persist in accomplishing more difficult fine motor tasks.	<p>Manipulate small objects with ease (e.g., strings beads, fits small objects into holes).</p> <p>Tie knots and shoelaces, with assistance.</p> <p>Button large buttons on clothing.</p> <p>Zip jackets.</p> <p>Cut on a line or around a large picture with scissors.</p> <p>String beads or pasta with holes onto a length of yarn.</p>	<p>Providing opportunities for child to practice tying, buttoning, and beading.</p> <p>Involving child in activities using fine motor skills (e.g., setting a table, preparing food, sorting buttons).</p> <p>Offering plenty of guidance and opportunities for child to take care of self (e.g., put on own coat, clean up after spills and messy projects).</p> <p>Providing blocks for construction.</p> <p>Allowing child to pour her own juice at snack.</p> <p>Helping child complete 12 – 16 piece puzzles.</p>
B11. Progress in abilities to use writing, drawing and art tools including pencils, markers, chalk, paint brushes, and various types of technology.	<p>Pour liquids from one container to another without spilling.</p> <p>Remove and replace easy-to-open container lids.</p> <p>Make complex forms and designs stretching rubber bands across geoboards.</p>	<p>Providing daily opportunities for child to use art supplies that support fine motor skills (e.g., clay, crayons, chalk, pencils, scissors, glue, stickers).</p> <p>Demonstrating clear and consistent boundaries about harmful objects and situations (e.g., when using a hammer).</p>

Strand 3: Health and Well-Being (Nutrition and Self-Care Practices)

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
C1. Demonstrate beginning participation in self-care.	<p>Anticipate feeding upon seeing breast, bottle, or food (e.g., turn her head toward the bottle or breast when cheeks are stroked).</p> <p>Move pureed food to the back of the mouth to swallow.</p> <p>Demonstrate increasing ability to self-soothe and fall asleep.</p>	<p>Responding positively and promptly when child indicates need (e.g., need for food, diaper change, blanket).</p> <p>Providing child with daily calm and rest periods or nap times.</p> <p>Providing child with a safe and comfortable sleeping environment.</p>
C2. Consume a variety of nutritious foods from all food groups with assistance.	<p>Begin to feed self simple finger foods such as crackers or cereal.</p> <p>Make personal food choices among several nutritious options.</p>	<p>Providing child-size eating utensils and cups with lids.</p> <p>Providing child with healthy, age-appropriate meals.</p>
C3. Participate in basic health and safety routines.	<p>Participate in getting ready for bed and sleeping routines, such as going to the sink to look for the toothbrush.</p> <p>Cooperate with washing hands and brushing of gums and teeth.</p> <p>Wash hands before eating or after going to the bathroom.</p>	<p>Encouraging child to participate daily in personal care (e.g., choose clothes to wear, get dressed).</p> <p>Modeling basic personal care routines.</p> <p>Talk about why one washes their hands before eating and before and after bathroom use.</p>
C4. Recognize and communicate health-related needs and/or interests.	<p>Say, "My tummy hurts" when experiencing a stomach ache.</p> <p>Ask for water when thirsty.</p>	<p>Understanding and recognizing typical signs of illness in child and responding appropriately, seeking assistance as needed.</p> <p>Modeling words to describe symptoms of illness (e.g., "I feel hot.") .</p>
C5. Show increased physical growth, strength, stamina, and flexibility.	<p>Participate in different physical activities (e.g., walking, climbing, throwing, dancing) with enthusiasm.</p> <p>Grow to a physical stature within the typical range.</p>	<p>Providing a consistent and reliable primary health care provider to monitor child's growth and development.</p> <p>Providing child with games and activities to promote a minimum of 60 minutes of physical activity each day (e.g., three periods of 20 minutes each).</p>
C6. Demonstrate increased participation in self-care.	<p>Cooperate with dressing by poking arms into the sleeves and undressing by pulling off a sock.</p> <p>Provide assistance in picking up toys.</p> <p>Begin to use a spoon and cup for feeding.</p> <p>Choose own clothes to wear, when asked.</p> <p>Put shoes on, without assistance.</p> <p>Choose to rest when tired.</p>	<p>Providing time and needed tools for self-help skills (e.g., unbreakable cups with handles, small spoons, paper towels for clean-up, bibs).</p> <p>During daily routines, encouraging child to help dress and undress.</p> <p>Helping child recognize personal signs of fatigue and need for rest.</p> <p>Providing opportunities for child to participate daily in personal care (e.g., choose clothes to wear, get dressed).</p>

Strand 3: Health and Well-Being (Nutrition and Self-Care Practices)

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
C7. Demonstrate personal health and hygiene skills and understand that those practices help to maintain good health.	<p>Use personal care objects correctly and regularly, sometimes with assistance (e.g., drinks from open cup, brushes hair, brushes teeth).</p> <p>Use tissue to wipe nose or to cover mouth when coughing.</p> <p>Wash and dry hands, with assistance and take care of own toileting needs.</p>	<p>Modeling and practicing proper hand washing and drying with child while singing the ABC song.</p> <p>Talking with child about health rules (e.g., cover mouth when coughing, throw away soiled tissues in wastebasket).</p> <p>Supporting child's efforts in toileting, brushing teeth, bathing, and washing hands.</p>
C8. Show awareness of healthy eating habits.	<p>Explain the primary function of certain foods (e.g., milk helps build strong bones).</p> <p>With assistance, choose, clean, and prepare, and eat foods that are nutritious.</p> <p>Provide simple explanations for own and others' food allergies.</p>	<p>Keeping nutritious food in the environment and encouraging child to help select, wash, or prepare nutritious meals and snacks.</p> <p>Talking with child about food choices in relation to allergies, religion, culture, family choices, and overall health.</p> <p>Involving child in planting, growing, and harvesting a vegetable garden.</p>
C9. Participate actively in games, outdoor play, and other forms of exercise.	<p>Participate in physical activities (e.g., movement games, dancing to music) and rest.</p> <p>Run spontaneously across the room or yard.</p> <p>Incorporate various physical activities while transitioning from one place to another (e.g., marches between the kitchen and the bathroom).</p>	<p>Modeling healthy daily physical activities (e.g., walking, running, lifting).</p> <p>Providing time and space and supervision for running across child-safe surfaces.</p> <p>Limiting child's screen time (TV, videos, computer games) to no more than two hours of quality children's programming each day.</p>
C10. Identify harmful objects, substances, or behaviors.	<p>Avoid touching or taking medicine without adult assistance, but know that medicine can improve health when used properly.</p> <p>Name allergies and foods that should be avoided.</p> <p>Recognize danger and poison symbols and avoid those objects.</p> <p>Understand the difference between "good touch and bad touch."</p>	<p>Demonstrating clear and consistent boundaries about harmful objects and situations.</p> <p>Talking to child about healthful choices that avoid allergic reactions.</p> <p>Reading stories in which children face harmful situations and discuss how they deal with them.</p>

Strand 3: Health and Well-Being (Nutrition and Self-Care Practices)

Indicators Children Are Learning To.....	Examples You May Observe the Child....	Strategies You Can Help/Support By.....
C11. Be aware of and follow universal safety rules.	<p>Depict traffic safety rules during dramatic play (e.g., using seat belts, looking both ways when crossing street, putting helmet on to ride tricycle).</p> <p>Show awareness of strangers.</p> <p>Know to call 911 in an emergency.</p>	<p>Providing role-playing situations for child to practice personal safety.</p> <p>Providing frequent reminders about safety rules (e.g., “You should always hold my hand when we walk in a parking lot.”).</p> <p>Identifying different people child can ask for help in an emergency (e.g., police officer, librarian, bus driver).</p>
C12. Perform self-care tasks independently.	<p>Put on some of own outside clothes.</p> <p>Pour from a small pitcher into a glass.</p> <p>Wash and dry own hands.</p>	<p>Offering guidance and opportunities for child to take care of self (e.g., put on own coat or clean up after spills).</p> <p>Giving child enough time to take care of personal needs such as zipping and unzipping coat.</p>
C13. Identify body parts and understand their functions.	<p>Point to body parts when prompted and identify their functions.</p> <p>Name body parts the medical professional will inspect.</p>	<p>Including songs, games, and finger plays that introduce body parts and their functions (e.g., “Head Shoulders, Knees, and Toes”; “Looby Loo”; “Eye Winker”).</p> <p>Play action games about body parts and functions (e.g., “We use our teeth to chew.”).</p>
C14. Demonstrate the stamina and energy to participate in daily activities.	<p>Regularly participate in physical activity (e.g., walks, dances, games).</p> <p>Help with physical chores (e.g., raking leaves, putting away toys).</p>	<p>Making physical activity fun (e.g., set up a simple and safe obstacle course where child climbs over, under, and through things).</p> <p>Participating in physical play with child (e.g., hiking, playing ball).</p>